

WHAT IS CLAIMED IS:

1. A method for producing a spunbonded nonwoven fabric by extruding a linear sheet of filaments, arranged side by side in parallel, in the form of a curtain from a plurality of spinning capillaries, comprising the steps of: aerodynamical pulling off and drawing of a filament sheet (8) which emerges from a drawing duct channel (12) or which is pulled off a spool, wherein the filament sheet is moved laterally crosswise by an air flow having periodically changing directions, the air flow being oriented alternately at an angle toward the filament sheet (8) as viewed in the horizontal plane.
2. The method for producing a spunbonded nonwoven fabric according to Claim 1, wherein air pauses exist between the air flows.
3. The method for producing a spunbonded nonwoven fabric according to Claim 1, wherein the blow-out direction is oriented perpendicularly toward the filament sheet (8).
4. The method for producing a spunbonded nonwoven fabric according to Claim 3, wherein the blow-out angle in the horizontal plane is 15°.
5. The method for producing a spunbonded nonwoven fabric according to Claim 4, wherein the blow-out direction in the vertical plane is directed at an angle downwards toward the filament sheet (8).
6. The method for producing a spunbonded nonwoven fabric according to Claim 5, wherein the blow-out angle in the vertical plane is 15°.
7. The method for producing a spunbonded nonwoven fabric according to Claim 1, wherein the air flow is directed toward the filament sheet (8) from the front or from the

RECEIVED
U.S. PATENT AND TRADEMARK OFFICE

rear thereof.

8. The method for producing a spunbonded nonwoven fabric according to Claim 1, wherein, subsequent to the air-flow movement, the filament sheet (8) is additionally deflected by periodically moving flow-guide surfaces.
9. A device for carrying out the method according to Claim 1, comprising: a spinning manifold having a plurality of spinning capillaries situated in a row, a cooling air duct, a drawing duct, a deposition belt, and at least one blowing duct (3) which is arranged beneath the drawing duct (12) in front of or behind the filament sheet (8), the blowing duct having air-outlet nozzles (10, 11) which are aligned at an angle toward the filament sheet (8) as viewed in the horizontal plane.
10. The device according to Claim 9, further comprising at least two rows of air-outlet nozzles (10, 11) arranged parallel to each other, the nozzles (10) of one row being aligned inversely to the nozzles (11) of the other row.
11. The device according to Claim 10, wherein the air supply to the nozzles (10, 11) of in each case one row can be closed by a closure member.
12. The device according to Claim 11, wherein the nozzles (10, 11) can be closed by a closure member.
13. The device according to Claim 12, wherein the nozzles (10, 11) can be closed by a rotatable cylinder (30).
14. The device according to Claim 13, wherein the cylinder (30) has a hollow design and is provided with longitudinal slits (31).

TOP SECRET//TTS/DO

15. The device according to Claim 13, wherein the nozzles (10, 11) are formed by corrugated sheet-like inserts (35) which have corrugations running at an angle to their longitudinal direction and which are inserted in the nozzle wall (33).
16. The device according to Claim 15, wherein the inserts (35) are replaceable.
17. The device according to Claim 16, wherein the sealing wall (34) is provided with superposed longitudinal slits (36) which correspond to the longitudinal slits (31) in the cylinder (30).
18. The device according to Claim 13, wherein the blowing duct (3) has an air accumulation space (32) which is located between the nozzle wall (33) and a sealing wall (34) toward the cylinder (30).
19. The device according to Claim 18, wherein the air accumulation space (32) is divided by an intermediate plate (14) into two chambers (15, 16) which are allocated to the upper and lower longitudinal slits (36) and nozzles (35), respectively.
20. The device according to Claim 13, wherein the cylinder (30) is situated in a longitudinal duct (4) which is filled with compressed air.
21. The device according to Claim 20, wherein the longitudinal duct (40) is connected to a compressed air accumulator (41).
22. The device according to Claim 10, wherein the blow-out angles of the nozzles (10, 11) of each nozzle row are equal.

23. The device according to Claim 22, wherein the blow-out angles are 10° to 60°.
24. The device according to Claim 23, wherein the blow-out angles are 45°.
25. The device according to Claim 9, further comprising an air guiding plate (2) which is adjustable in the direction of the blowing duct mounted opposite the blowing duct (3) at the other front side of the filament sheet (8).
26. The device according to Claim 9, further comprising an adjustable mechanical air guide for controlling the direction of the air flow provided beneath the blowing duct (3).
27. The device according to Claim 9, wherein the air guide is composed of a swivelling wing flap (22).
28. The device according to Claim 9, wherein the air guide is composed of Coander dishes.
29. A spunbonded nonwoven fabric produced according to the method of Claim 1.